**Technology Integration: K-5**

**Grade K - 2**

* BrainPop Jr.
	+ Use for introduction to new topics in Science & Social Studies
		- Questions and games after video
* Class Complete <http://teacher.classcompete.com/auh/login>
	+ Math Quiz
* Class Dojo <https://www.classdojo.com/>
	+ Use for behavior management and communicating with parents
* Cosmic Kids <http://www.cosmickids.com/>
	+ Yoga
	+ Mindfulness activities
* Create Digital Stories [www.storyjumper.com](http://www.storyjumper.com), ABCYS
	+ Take pictures
	+ Collaborate on the book
* Epic! <https://www.getepic.com/educators>
	+ ELA Centers
	+ Mentor Text
	+ Weekly Poem
	+ Writing Research for non-fiction writing
* Freckle <https://www.freckle.com/>
	+ Differentiate
	+ Practice Math & ELA
* GoNoodle <https://www.gonoodle.com/>
	+ Mindfulness activities
* Google Docs or Microsoft Word
	+ Create biographies
	+ Create a school newspaper for writing with enrichment students
	+ Students can use their voice to type
	+ Type names, “AT” words, spelling words, etc. and alphabetize
* Google Sheets or Microsoft Excel
	+ Students create a daily schedule, listing times for each activity
* Internet
	+ Choosing a social studies or science topic to explore
	+ Students research and identify problems or issues within the topic
* Instagram or Twitter
	+ Post about all the exciting things happening in your district, school, and classrooms. Share your story, celebrate kids, and spotlight teaching and learning! Include pictures of kids in action so that you become the main storyteller in your classroom. Also, spotlight instructional approaches.
* Kahoot <https://kahoot.it/#/>
	+ Create questions after a lesson (Exit Ticket)
	+ Getting to know you in the beginning of the year
* Math Help <https://www.prodigygame.com/>
* PebbleGo
	+ Research
* Photo Story
	+ Scan the book and then record it with teacher voice
	+ Create a digital story
* Plickers <https://plickers.com/>
	+ Math Review prior to test
	+ SS & Science Review prior to test
	+ Quick Assessment
* Prodigy
	+ Math Centers
* QR Codes <https://www.the-qrcode-generator.com/>
	+ Create a math worksheet
		- Tape the problems up around the room
		- Students can scan the QR code after finish completing the problem
		- Students check off on worksheet if their correct or wrong
* Raz Plus
	+ Reading per reading level
* Readworks <https://www.readworks.org/>
	+ Everything can be read aloud
	+ Works on comprehension
	+ Article of the Day
* Seesaw <https://web.seesaw.me/>
	+ Publishing Party
* Skyping [www.skype.com](http://www.skype.com)
	+ Mystery skype – Guest readers
	+ Read Across America
	+ Skype with families to compare and contrast family traditions and cultures
	+ Skype with other schools in and out of district to share learning
* Splash Math <https://www.splashmath.com/>
	+ Math Centers
* Tumblebooks
	+ Create a book report
* YouTube
	+ Read stories online
	+ Create a story map on the smartboard after reading the story
	+ Create videos
		- To show the butterflies or chicks

**Grade 3-5**

* BrainPop
	+ Use for introduction on a new topic
		- Questions and games after video
* Class Dojo <https://www.classdojo.com/>
	+ Use for behavior management and communicating with parents
* Collaborate
	+ Communicate with other classrooms around the world:<https://plus.google.com/communities/100662407427957932931>
	+ <http://www.globalschoolnet.org/index.cfm>
	+ Teacher poses a worldwide issue and students reply via [www.blogger.com](http://www.blogger.com)
	+ <http://www.epals.com/#!/global-community/>
* Epic! <https://www.getepic.com/educators>
	+ ELA Centers
	+ Mentor Text
	+ Weekly Poem
	+ Writing Research for non-fiction writing
* Factile <https://www.playfactile.com/>
	+ Create an online quiz game board to review
* Freckle <https://www.freckle.com/>
	+ Differentiate
	+ Practice Math & ELA
* GeoGebra <https://www.geogebra.org/>
	+ Graphing tool
* Glogster
	+ Creating posters for SS
* GoNoodle <https://www.gonoodle.com/>
	+ Mindfulness activities
* Google Docs or Microsoft Word
	+ Typed up a question
		- Have it on the board to all answer a question
	+ Type acrostic poems
	+ Type rough drafts
	+ Think, Pair and Share
	+ Spelling test
	+ Do Now
	+ Exit Ticket
	+ Create a demonstration story
	+ Use voice typing
		- Notes
		- Conferencing – Student reads aloud
	+ Interview
	+ Mother Earth Letters
	+ Thankful for …… (Feathers of a Turkey)
	+ Thankful letters to staff
	+ Design a calendar in Microsoft Word with links to activities designed specifically for the month
	+ Type past, present and future timelines
	+ Discrete Trials
		- Type daily word and insert picture to match
	+ Type a sentence about the 100 day projects
	+ Type Fiction and Non-Fiction Writing
* Google Earth <https://www.google.com/earth/>
* Google Forms
	+ Create survey
	+ Spelling Test in Forms
	+ Comprehension Questionnaire of a reading in Forms
	+ Peer evaluation of group work in Forms
	+ Get to know you Form
* Google Maps <https://www.google.com/maps>
	+ Scavenger hunt for latitude and longitude
* Google Sheets or Excel
	+ Chart a survey
	+ Count and chart skittles
	+ Rocks & Minerals
	+ Plan, estimate a family move
	+ Smarties activity with a shared document in Sheets
* Google Slides or PowerPoint
	+ Create digital story book on rounding
	+ Create presentations on different topics (i.e. Lenape, traditions, regions, presidents, mammals, rainforest, simple machines, weather)
	+ Add responses for Science
	+ Create a PowerPoint on traditions
	+ Design a presentation to get the board to pass a request
	+ Persuasive writing assignment instead of writing another essay
		- In 5 slides or less “Why should you be hired for a writing job.”
* Instagram or Twitter
	+ Post about all the exciting things happening in your district, school, and classrooms. Share your story, celebrate kids, and spotlight teaching and learning! Include pictures of kids in action so that you become the main storyteller in your classroom. Also, spotlight instructional approaches.
* Internet
	+ Safe Search <http://www.safesearchkids.com/>
	+ Latitude and Longitude
	+ Mammals
	+ Explorers
	+ Regions
	+ President Research
	+ Rainforest Research
	+ Today in history <http://www.todayinhistory.com/>
	+ Online word of the day
	+ Access online weather forecast
	+ Current Events
	+ Earth Science Picture of the Day <http://epod.usra.edu/> (Each day a different image or photograph is featured, with an accompanying caption, which deals with various topics in Earth Science.)
	+ Practice effective searching to research information [www.kidsclick.org](http://www.kidsclick.org)
	+ Investigate which tool is best to use for information/research
* Kahn Academy <https://www.khanacademy.org/>
	+ Math lesson review or reinforcement
* Kahoot <https://kahoot.it/#/>
	+ Science test review
	+ Math lesson review or reinforcement
* Keyboarding
	+ <http://jefftwp.typinginstructorkids.com>
* Type to Learn
* Typing Club <https://www.typingclub.com/>
* [www.typingtest.com](http://www.typingtest.com)
* Math Help <https://www.prodigygame.com/>
* Microsoft Publisher
	+ Create a brochure on region or county or create a restaurant menu.
* Mystery Science
	+ Supplement for science
* News for students
	+ <https://newsela.com/>
	+ <https://www.dogonews.com/>
* PebbleGo
	+ Research
* Photo Story
	+ Scan the book and then record it with teacher voice
	+ Create a digital story
* Plickers <https://plickers.com/>
	+ Math Review prior to test
	+ SS & Science Review prior to test
	+ Quick Assessment
* Prodigy
	+ Math Centers
* QR Codes <https://www.the-qrcode-generator.com/>
	+ Create a division worksheet
		- Tape the problems up around the room
		- Students can scan the QR code after finish completing the problem
		- Students check off on worksheet if their correct or wrong
* Quia <https://www.quia.com/web>
	+ Reinforce Math concepts
* Quizlet <https://quizlet.com/>
	+ Create flashcards, print out information for vocabulary, spelling quizzes or weekly tests
* Raz Plus
	+ Reading
* Readworks <https://www.readworks.org/>
	+ Everything can be read aloud
	+ Works on comprehension
	+ Article of the Day
* Shutterfly
	+ Share pictures with parents
* Skyping [www.skype.com](http://www.skype.com)
	+ Mystery skype – Guest readers
	+ Read Across America
	+ Teaching Latitude & Longitude – Other classes or schools
* Spelling City [www.spellingcity.com](http://www.spellingcity.com)
	+ Practice with spelling lists
	+ Word Work Centers
* Splash Math <https://www.splashmath.com/>
	+ Math Centers
* Story Jumper
	+ Students create books
* Study Jams <http://studyjams.scholastic.com/studyjams/>
* TrueFlix
	+ Supplements for Social Studies and Science
* Video Newsletter <http://v2.touchcast.com/product>
	+ 7 students from each class (as selected by their teachers) do research every week about what’s happening on each grade level, and then share those updates on camera.
* Wordle
	+ Father's Day
	+ Classmate - have each student write a sentence about every person in their class and compile them to put into a Wordle for each kid.
* Writing A-Z
	+ Write a Narrative Story

**Research**

* Citing <http://www.easybib.com/>
* Dictionary <http://www.dictionary.com/>
* Online books <http://www.bartleby.com/>
* Use online library catalog to locate resources

**Digital Citizenship**

* Digital Citizenship <http://www.cybercivics.com/>
* Digital Citizenship <http://www.digizen.org/>
* Digital Citizenship <https://www.edutopia.org/blog/digital-citizenship-resources-matt-davis>
	+ Fiction verse Non Fiction

**Teacher Resources**

* Add questions to videos <https://edpuzzle.com/>
* American Museum of Natural History <http://www.amnh.org/>
* Apps for Bloom’s Taxonomy <http://www.schrockguide.net/bloomin-apps.html>
* Capture, create and share videos <https://www.wevideo.com/>
* Choice Eliminator for Google Forms
* Clean up video <http://viewpure.com/>
* Collaborate <http://www.globalschoolnet.org/index.cfm>
* Connect <https://twitter.com>
* Create a virtual wall with students <https://padlet.com/>
* Create animated videos and presentations <http://www.powtoon.com/>
* Create notes keep.google.com
* Create Timelines <http://www.tiki-toki.com/>
* Free Educational Videos <http://www.watchknowlearn.org/default.aspx>
* Instructional Technology <https://www.jefftwp.org/domain/29>
* Mad Libs <http://www.glowwordbooks.com/blog/category/kids-online-mad-libs/>
* Math Resources <http://illuminations.nctm.org/Search.aspx?view=search&type=ac>
* MS/HS Math Videos <http://www.virtualnerd.com/>
* Open Clip Art <https://openclipart.org/>
* PARCC practice <https://www.edcite.com/>
* Portal <http://www.knowitall.org/>
* Remind App <https://www.remind.com/>
	+ Communicate with parents & students
* Science Resources <http://sciencenetlinks.com/afterschool-resources/>
* Survey [www.polleverywhere.com](http://www.polleverywhere.com/)
* Teacher Resources <https://www.sophia.org/sophia-for-teachers>
* Teacher Tips <http://www.weareteachers.com/>

**Technology Equipment**

* Digital Camera Ideas
	+ After a field trip on which you have taken at least one picture for each child or pair of children, download the pictures and have the children write a summary related to that picture.
	+ Give students a list of items to look for in the classroom or in the school.  They must take pictures and compile a presentation (Slide show, web page, etc.) of the things they found.
		- Letter Book – Students have a letter and must take pictures of things around the school that begin with that letter.
	+ Give students a portion of a digital picture and have them guess what the picture is of.  A great site with examples of this is: <http://takeacloserlook.homestead.com/>
	+ Photograph the seasons. Record changes in nature through the seasons. Pick a tree or other plant on school grounds and have the students photograph each week throughout the school year.
	+ Students take pictures of places in the community and compile a report or brochure.
	+ Take photos or videos illustrating vocabulary words, stories, or peoms
	+ Take photos or videos in Physical Education to record events and skills.
	+ Take pictures during the day to give a photographic record of classroom procedures. Print the pictures out and post them so students can review the procedures as needed.
	+ Take pictures of each student. Let the students design a picture or poster of their favorite things.
	+ Take pictures of students throughout the year to illustrate how they grow. This is best done outside in full light, with students lined up against a wall and with another object in the photo or a mark made on the wall so that difference in sizes through the year can be easily seen.
* Document Camera
	+ Daily math sheets
	+ Demonstrate the homework
	+ Highlights notes in a book
	+ Reading a book
	+ Show student work
	+ Record student reading their writing
* iPad
	+ Record themselves while they are reading
	+ Reinforcement during centers
* OSMO (Centers)
	+ Matching – Uppercase Letters and Lowercase letters
	+ Money
	+ Numbers
	+ Coding
* Smart Board
	+ Class notes – Save for absent students
	+ In Literacy, put a passage on the screen and have students underline or highlight or mark key information for discussion or better understanding of passage
	+ Using Maps to show a route
	+ Landforms Activity
	+ Jeopardy Review Games
* Alexa/Google Assistant/Windows Cortana
	+ Students ask questions
	+ Students ask for definitions

**Other Software/Sites**

* ABCYA <http://www.abcya.com/>
* Board Maker
* Destiny
* Discovery Education <http://www.discoveryeducation.com/>
* ESGI
* Google Classroom
* IXL <https://www.ixl.com/>
* Linkit! <https://jefftwp.linkit.com>
* Reading Eggs
* Realtime
* Scholastic News <https://scholasticnews.scholastic.com/>
* Sum Dog <https://www.sumdog.com/>

**Extensions**

* Insert Learning
	+ Add questions to any online site
* Chat Pix App
	+ Dr. Seuss Favorite Story
	+ MLK
* Dualless Screen Extension
	+ Video on one side with a form on the other side
	+ Graphic Organizer on one side with a reading on the other side
* Screencastify
	+ Make movies

**Coding**

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| **Strand** | **E. Computational Thinking: Programming:** *Computational thinking builds and enhances problem solving, allowing students to move beyond using knowledge to creating knowledge.* |
| **K-2** | *TEACH INTRODUCTORY CODING*Code.org:* <https://code.org/educate/k5>

Scratchjr: * <http://www.scratchjr.org/>

Google’s Blockly Games: * <https://blockly-games.appspot.com/?lang=en>

Tinkercad:* <https://www.tinkercad.com/>

Kodable:* <https://www.kodable.com/>
 |
| **3-5** | *TEACH INTRODUCTORY CODING*Code.org:* <https://code.org/educate/k5>

Scratchjr: * <http://www.scratchjr.org/>

Google’s Blockly Games: * <https://blockly-games.appspot.com/?lang=en>

Storytelling: * <https://www.cs-first.com/clubplan/storytelling>

Tinkercad:* https://www.tinkercad.com/
 |
| **6-8** | *TEACH INTRODUCTORY CODING*Code.org* <https://code.org/curriculum/algebra>
* <https://code.org/curriculum/science>

MIT App Inventor: * <http://appinventor.mit.edu/explore/>

Scratchjr: * <https://scratch.mit.edu/>

Bebras CT challenge:* <http://www.bebraschallenge.org/>

Tinkercad:https://www.tinkercad.com/ |
| **9-12** | *TEACH INTRODUCTORY CODING*Code.org: * <https://code.org/learn/beyond>

Khan academy:* <https://www.khanacademy.org/computing/computer-programming>

Made with code:* <https://www.madewithcode.com/>
 |
| **General Resources** | Exploring Computational Thinking - Google for Education130+ resources and videos* <https://www.google.com/edu/resources/programs/exploring-computational-thinking/>

ISTE Computational Thinking for All* <https://www.iste.org/explore/articledetail?articleid=152>

ISTE video on why students need computational thinking* <https://www.youtube.com/watch?v=VFcUgSYyRPg>

CS First is a free program that increases student access and exposure to computer science (CS) education through after-school, in-school, and summer programs* <http://www.cs-first.com/>

Article discusses teaching strategies: * <http://www.edutopia.org/blog/15-ways-teaching-students-coding-vicki-davis>
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